

KREUTZER et al. — 09/810,521  
Client/Matter: 021123-0278416

## I. AMENDMENT TO THE CLAIMS

1. (Previously Presented) An L-Lysine-producing bacterium of the species *Corynebacterium glutamicum* comprising:

- a) an overexpressed wild type *pyc* gene of *Corynebacterium glutamicum* encoding pyruvate carboxylase, wherein overexpression of said *pyc* gene is achieved by increasing the copy number of said *pyc* gene, and
- b) an overexpressed wild type *dapA* gene of *Corynebacterium glutamicum* encoding dihydrodipicolinate synthase, wherein overexpression of said *dapA* gene is achieved by using a *dapA* promoter selected from the group consisting of: the *dapA* promoter comprising the MC20 mutation as set forth in SEQ ID NO: 5 and the *dapA* promoter comprising the MA16 mutation as set forth in SEQ ID NO: 6, and

whereby said overexpression of said wild type *pyc* gene of *Corynebacterium glutamicum* or said wild type *dapA* gene of *Corynebacterium glutamicum* results in pyruvate carboxylase activity or dihydrodipicolinate synthase activity above the level of that found in a wild type *Corynebacterium glutamicum*.

2-15. (Canceled)

16. (Previously Presented) An *Escherichia coli* K-12 strain DH5 $\alpha$ /pEC7lysE<sub>pyc</sub>, deposited as DSM12872.

17-21. (Canceled)

22. (Previously Presented) An isolated DNA comprising the nucleotide sequence shown in SEQ ID NO: 5.

23. (Previously Presented) An isolated DNA comprising the nucleotide sequence shown in SEQ ID NO: 6.

24-26. (Canceled)

27. (Previously Presented) The bacterium of claim 1 further comprising an overexpressed *lysC* gene of *Corynebacterium glutamicum* encoding aspartate kinase, wherein said gene is expressed at a level that is higher than its expression level in wild type *Corynebacterium glutamicum* by increasing the copy number of said gene.

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28. (Canceled)

29. (Canceled)

30. (Previously Presented) An L-Lysine-producing bacterium of the species *Corynebacterium glutamicum* comprising:

- a) an overexpressed wild type *pyc* gene of *Corynebacterium glutamicum* encoding pyruvate carboxylase, wherein overexpression of said *pyc* gene is achieved by increasing the copy number of said *pyc* gene,
- b) an overexpressed wild type *dapA* gene of *Corynebacterium glutamicum* encoding dihydrodipicolinate synthase, wherein overexpression of said *dapA* gene is achieved by using a *dapA* promoter selected from the group consisting of: the *dapA* promoter comprising the MC20 mutation as set forth in SEQ ID NO: 5 and the *dapA* promoter comprising the MA16 mutation as set forth in SEQ ID NO: 6, and
- c) an overexpressed wild type *lysE* gene of *Corynebacterium glutamicum* encoding a lysine export carrier, wherein overexpression of said *lysE* gene is achieved by increasing the copy number of said *lysE* gene, and

wherein the overexpressed genes are expressed at levels that are higher than their respective expression levels in wild type *Corynebacterium glutamicum*.

31. (Previously Presented) The bacterium of claim 30 further comprising an overexpressed *lysC* gene of *Corynebacterium glutamicum* encoding aspartate kinase wherein said gene is expressed at a level that is higher than its expression level in wild type *Corynebacterium glutamicum* and overexpression of said gene is achieved by increasing the copy number of said gene.

32. (Canceled)